

## ABSTRACT

A rear-lifting cradle lifts the rear of a modern transit bus by a wrecker even if it not designed for such lifting. A minimum of bus modification is needed for the use of this cradle. The cradle includes an assemblage of robust steel tube members including a crossbar, two frame extenders, and two slider arms. The bus modifications include replacing the rear plate of each of the two rear axle stabilizers. The two frame extenders couple into square holes in the replaced rear stabilizer plates while the posts bear on the top surface of the frame extenders. The slider arms have short columns and locator pins, which fit into the holes of the rear jacking plates, which are part of the bus. When the upwardly open forks of the lifting arms of a wrecker engage the crossbar of this rear-lifting cradle, the bus is lifted with the major stresses coupled into the main structural bus frame. Any residual lifting stresses are spread into the two rear jacking points, which are sufficiently robust to accept jacking stresses. This four-point stress lifting displacement successfully allows the bus to be towed with a conventional towing vehicle.

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Bus Lift Full Appl